UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
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One Georgia Center
600 West Peachtree Street, NW
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SUBJECT: Environmental Assessment for the Interstate 85 HOV to HOT Conversion Project in DeKalb and Gwinnett Counties, Georgia

Dear Mr. Bowman:

The U.S. Environmental Protection Agency (EPA) has reviewed the referenced Environmental Assessment (EA) in accordance with its responsibilities under Section 309 of the Clean Air Act and Section 102(2)(C) of the National Environmental Policy Act. The Georgia Department of Transportation (GDOT) and the Federal Highway Administration (FHWA) propose to convert approximately 16 miles of High Occupancy Vehicle (HOV) lanes to High Occupancy Toll (HOT) lanes on Interstate 85 (I-85) in DeKalb and Gwinnett Counties, Georgia. The proposed project limits would extend from Chamblee Tucker Road just south of Interstate 285 to approximately 4,752 feet north of Old Peachtree Road in Gwinnett County.

The EA describes the need for a new management strategy for the I-85 HOV lanes which are posed to reach capacity and experience a degraded level of service (LOS) for transit and other HOV commuters. In response to the current and projected future HOV operations and the inability of the HOV lanes to provide commuters with an alternative that facilitates reliable travel times on I-85, GDOT proposes to implement dynamic management of the existing HOV lanes by controlling vehicle occupancy requirements as well as fee structure in order to maintain reliable travel times in the corridor.

Currently, vehicles having two or more persons (HOV 2+), vanpools, carpools, motorcycles, transit, alternative fuel vehicles (AFV), and emergency vehicles are allowed to use the I-85 HOV lanes. There is no fee to use the HOV lanes for these users. However, to improve the LOS in the HOV lanes and provide more competitive travel times, GDOT proposes to increase the requirement from the existing HOV 2+ to three or more occupants in a vehicle (HOV 3+) to travel in the lanes. The preferred alternative would convert the existing HOV 2+ lanes to HOT 3+ lanes. HOT 3+ lanes allow for general use by buses and other HOV users that meet the occupancy requirements (3+) in addition to single-occupancy vehicles (SOV) and HOV 2 for a fee. The number of vehicles using these lanes would be controlled through dynamic pricing via electronic toll collection. The fee would be subject to change based on the severity of traffic conditions and/or the availability of capacity in the HOT lane. As with the existing HOV

lanes, the above mentioned vehicles and those meeting the occupancy requirements would be able to use the HOT lanes toll-free.

Four alternatives were considered in the EA including: 1) HOV 2+ (no build alternative); 2) HOT 2+ (to allow for toll collection); 3) HOV 3+ (no SOV usage or toll collection); and 4) HOT 3+ (preferred alternative). Alternatives 1 and 2 were not considered viable due to an inability to provide reliable trip times in the I-85 HOV lanes. Alternative 3 was not considered viable due to an inefficient use of available roadway capacity in the HOV lanes and a degradation of travel times in the I-85 general purpose lanes. The preferred alternative would include four HOT lane tolling sections in the southbound I-85 direction and five in the northbound direction. Three different lane separation alternatives were also considered, including barrier-separated, buffer-separated, and lane striping. The reconstructed HOT lanes would continue to be separated from the general purpose lanes by pavement striping.

Based on our review of the EA, EPA has identified a number of concerns related to the selection and implementation of the preferred alternative. These include issues related to the operation of the proposed project and the need for additional post-construction monitoring. We offer the following comments for your consideration as you develop the final EA for this project:

Alternatives

The EA does not adequately describe a full range of alternatives that could be successfully implemented to meet the need of reducing HOV-lane congestion and improving HOV trip time. There is no information in the EA that describes the extent to which LOS in the HOV lanes is being compromised by HOV lane violators not meeting the current occupancy requirements. One recent HOV monitoring study identified a very high occupancy violation rate for HOV lanes, with approximately 13 percent of all HOV lane use in metro Atlanta coming from SOV drivers breaking the rules. Furthermore, the draft *I-85 HOV to HOT Toll Traffic and Revenue Report* identifies approximately 15 to 30 percent of the traffic in the HOV lanes as "violators." One alternative not considered in the EA is an alternative of increasing enforcement to address the loss of capacity in the HOV lanes due to violators. The percent of HOV-lane users who are violators and the efficacy of enforcement at current and expanded levels is a potentially significant issue that is not assessed in the EA. EPA recommends that the final EA include an analysis of this alternative to meet the project purpose and need.

EPA also recommends that the Final EA include a more robust analysis of Alternative 3 (HOV 3+). As stated previously, Alternative 3 was not considered viable due to an "inefficient use of available roadway capacity" in the HOV lanes and a degradation of travel times in the I-85 general purpose lanes. However there is no information in the EA to support this conclusion. Furthermore, there is no analysis in the draft *I-85 HOV to HOT Conversion Traffic Analysis* of this specific alternative. The final EA should include an analysis of the LOS in the HOV and general purpose lanes to demonstrate the extent to which this alternative will not meet the project purpose and need.

Not related to a specific alternative, the EA should include more information about the effectiveness of current enforcement strategies for HOV lanes in this corridor. Clearly, the

current level of enforcement has not been successful in deterring a significant percentage of violators. The preferred alternative will include an enhanced presence of enforcement vehicles and personnel. As compared to current activities, how much additional enforcement and what types of new enforcement will be provided to address this issue?

Traffic

The EA suggests that the conversion of existing HOV lanes to HOT lanes would have no appreciable impact on the overall traffic demand on I-85. It has been shown that HOV use is increased through provision of enhanced connecting transit service and supporting facilities, such as park-and-ride lots. Other related projects described in the EA include the installation of two new park and ride lots and the purchase of 36 additional commuter buses. Five additional bus routes are planned. It is unclear if the traffic analysis includes the effects from these planned facilities, new buses, new proposed routes, and potential new carpool usage. This may significantly impact projected HOV lane use. EPA recommends that the final EA address whether this potential demand has been adequately modeled.

Environmental Justice

The methodology for distribution of transponders has yet to be determined, but this is considered an area of greatest concern for analysis of potential impacts on environmental justice communities. What monetary investment will be required to register and keep an active card/transponder (for toll-free and toll users)? Will this incur extraordinary hardship for low-income and/or minority persons utilizing the project facility? Has GDOT and SRTA developed a communication/media plan to ensure access for EJ communities? EPA recommends that the final EA address this issue and these questions to the extent possible. Given the lack of evidence to support the conclusions about disproportionate impacts, EPA supports the decision to conduct an annual performance survey to gain information about income levels of users. This is included in additional comments below related to post-construction monitoring.

Monitoring

In December 2008, the Atlanta Region was awarded a U.S. Department of Transportation Congestion Reduction Demonstration Grant for the HOV/HOT conversion project. In this agreement, it is described as a pilot project on I-85 N between Chamblee-Tucker Road and Old Peachtree Road that would provide for: 1) conversion of 15.8 miles of existing HOV lanes to HOT lanes; 2) enhancement of transit services; and 3) implementation of innovative technologies. This project will serve as a "pilot" to demonstrate the extent to which congestion pricing along with other complementary transportation solutions will work to support broader congestion reduction strategies for the Atlanta region. Since this project is considered a pilot for the potential conversion of all the HOV lanes in Atlanta to HOT lanes, EPA strongly recommends that GDOT and FHWA develop an extensive monitoring program to determine the extent to which reliable travel times are achieved and if the level of impacts are similar to what was modeled or assessed.

The objectives of such a monitoring program would include the following: 1) observation of the congestion reduction benefits, including the HOV to HOT conversion impacts; 2) quantification of any emissions reductions and fuel savings; and 3) assessing any equity impacts. The I-85 HOV lanes were designated as a Transportation Control Measure (TCM) in the Atlanta ozone State Implementation Plan in the 1990s. In November 2009, the I-85 North HOT lane demonstration pilot project was approved as a substitute TCM for the existing I-85 North HOV lanes. As such, it will be important to determine how this project affects emissions over time. EPA recommends that the EA include a comprehensive emissions testing and monitoring program to verify the modeled emission changes associated with the changes in the operating conditions for the HOV/HOT lanes.

Furthermore, the Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU) requires that HOV/HOT facilities be monitored to ensure that operations are in accordance with SAFETEA-LU and that toll-user access does not degrade the facility as defined by SAFETEA-LU. In this regard, GDOT should establish, manage, and support a performance monitoring, evaluation, and reporting program for the facility that provides for continuous monitoring, assessment, and reporting on the impacts that the vehicles may have on the operation of the facility and adjacent highways. As a pilot project, what specific measures will be monitored to determine project success or failure? One measure of success should focus on trip time reliability for transit modes potentially using bus departure and arrival times. Such monitoring and potential plans are not included in the EA. EPA recommends that the final EA include a thorough discussion of a proposed monitoring protocol to address these issues. This should also include additional details about the proposed annual performance survey that would be conducted post-construction to ascertain information about income levels for users of the HOV/HOT facility to address the potential for adverse impacts to environmental justice populations.

Managed Lane Operations

According to the EA, the following vehicle classifications would be eligible to use I-85 HOT lanes without incurring a toll: passenger vehicles with three or more occupants; buses; on-call emergency vehicles; motorcycles; and registered alternative-fuel vehicles. However, the EA states that all vehicles that use this lane (either toll-free or by paying a toll) will now be required to register as a customer with the Georgia State Road and Tollway Authority (SRTA), obtain a transponder, and have a prepaid toll account with an initial deposit prior to using the managed (HOV/HOT) lane. Only registered vehicles would be allowed to use the facility without incurring a toll.

EPA has concerns about this proposed management strategy, particularly as it relates to the ability for unregistered carpools to use the managed lane without incurring a toll. As a TCM and an HOV project, GDOT and SRTA should manage these lanes first and foremost to maximize the throughput of non-SOV vehicles. What percentage of current trips in the HOV lanes are "pass-through" trips with origins and/or destinations outside the Atlanta region? There is no information in the EA about "infrequent" users of the HOV lanes (e.g., those that would not

likely "register" to use the lanes) and the extent of their use of the existing managed lanes. EPA recommends this information be included in the final EA. EPA also strongly recommends that GDOT and SRTA develop a management strategy to allow all eligible carpools and vehicles that meet the occupancy requirements to use the new HOT lanes, irrespective of advance registration, such that they would not incur a toll or penalty.

The conversion to HOT lanes, in conjunction with dynamic pricing, would allow for a more reliable commute for the drivers that choose to use the managed lane. The methods to achieve reliable travel time will vary as travel demand and travel conditions vary during the day and as traffic flow and volumes change. There is very little information in the EA related to the potential up-front costs and tolls that would be charged for use of the facility. How will minimum and maximum tolls be determined? Are there anticipated to be any financial eligibility criteria for transponder account holders? EPA recommends that the final EA include more details on the toll rates and other costs associated with the proposed action.

EPA also has concerns about the use of toll revenue associated with the project. A Memorandum of Understanding (MOU) is under development between GDOT and SRTA that would govern the use of toll revenue. The EA states that, "All toll revenues will be used for debt service, reasonable return on investment, and for the costs necessary for the proper operation and maintenance of the toll facility, including reconstruction, resurfacing, restoration, and rehabilitation. Should there be any excess revenue available after those obligations are met, they will be used in accordance with MOU." There is nothing in the EA to provide information on how toll revenues will be prioritized in the future. In accordance with SAFETEA-LU, the use of toll revenues generated by HOV/HOT facilities shall give priority consideration to projects for developing alternatives to SOV travel and projects for improving highway safety. In early discussions about this project, there was an expectation that any excess revenues generated by the project would go toward expanding transit services in the I-85 corridor. The congestion reduction demonstration grant recognizes the importance of developing complementary transportation solutions. EPA recommends that the proposed MOU recognize this and place a priority on enhancing transit in the project corridor with any excess funds.

Communications Strategy

The methodology for communicating the specifics of the operations of the managed lanes to the public has not been thoroughly developed. The EA suggests that SRTA will continue to work with a third-party vendor to promote carpooling in the project area and assist commuters in finding a third passenger to meet HOV 3+ requirements, especially in low-income and minority communities. How do you intend to communicate the rules of managed lane use (and required pre-registration) to the general public or to others that might use the facility such as pass-through visitors? EPA recommends that the final EA include any additional information related to the communications strategy that will be used for HOV lane conversion, transponder dissemination and account activation.

We appreciate the opportunity to work with GDOT and FHWA on this important project. We are prepared to assist you in implementing any of the measures described in our comments to help in addressing the potential impacts of the proposed action. Please contact Ben West at (404) 562-9643 to discuss this letter or if you have questions.

Sincerely,

Heinz J. Mueller, Chief
NEPA Program Office
Office of Policy and Management

cc: Federal Highway Administration – Georgia Division
Georgia Regional Transportation Authority
Georgia State Road and Tollway Authority